

## WHAT IS CLAIMED IS:

- 1           1. A communication system optimized for multipart responses, the  
2 communication system comprising:
  - 3                 a client adapted to request content from the communication system, the  
4 request for content including an indicator that a multipart response is desired;
  - 5                 a proxy coupled to receive the request for content and adapted to access the  
6 communication system for the requested content; and
  - 7                 a server coupled to the proxy to provide the requested content, wherein the  
8 proxy is adapted to provide a single part response to the client, the single part response  
9 including an indicator to signal a subsequent multipart response that is related to the single  
10 part response.
- 1           2. The communication system according to Claim 1, wherein the  
2 request for content comprises a HyperText Transfer Protocol (HTTP) request having a  
3 request header.
- 1           3. The communication system according to Claim 2, wherein the  
2 request header includes the indicator that a multipart response is desired.
- 1           4. The communication system according to Claim 1, wherein the single  
2 part response comprises a HyperText Transfer Protocol (HTTP) response having a  
3 response header.
- 1           5. The communication system according to Claim 4, wherein the  
2 response header includes the indicator that a multipart response will be subsequently  
3 transmitted.

1           6. A method for multipart response optimization, comprising:  
2           generating a first request for content, the first request including a multipart  
3 response expectation indicator;  
4           generating a first response to the first request for content, the first response  
5 including a multipart response capability;  
6           generating a second request for content; and  
7           generating a second response to the second request for content, wherein the  
8 second response includes a format that is indicative of the multipart response capability  
9 indicator.

1           7. The method according to Claim 6, wherein a lack of multipart  
2 response capability is signalled by an absence of a multipart response capability indicator.

1           8. The method according to Claim 7, wherein the second request for  
2 content is one of a plurality of parallel requests for single part content.

1           9. The method according to Claim 6, wherein support for the multipart  
2 response capability is signalled by a multipart response capability indicator.

1           10. The method according to Claim 9, wherein the second request for  
2 content is a single request for multipart content.

1           11. A mobile terminal wirelessly coupled to a network which includes a  
2 proxy coupled to the network, the mobile terminal comprising:  
3           a memory capable of storing at least a multipart header module;  
4           a processor coupled to the memory and configured by the multipart header  
5 module to generate content requests having a multipart response expectation indicator; and  
6           a transceiver configured to facilitate a content response exchange with the  
7 proxy, wherein the multipart header module is further configured to search the content  
8 response for a multipart capability indicator.

1           12. The mobile terminal according to Claim 11, wherein existence of the  
2 multipart capability indicator in the content response precludes generation of parallel  
3 content requests from the processor.

1           13. A computer-readable medium having instructions stored thereon  
2 which are executable by a mobile terminal for requesting optimized multipart response  
3 handling in a network by performing steps comprising:

4           supplying a multipart expectation indicator in a content request;  
5           receiving a content response to the content request;  
6           examining the content response for a multipart capability indication; and  
7           precluding transmission of parallel content requests when the multipart  
8 capability indication exists within the content response.

1           14. A proxy coupled to a network to detect multipart content requests,  
2 the proxy comprising:

3           means for receiving a first content request;  
4           means for determining the existence of a multipart response expectation  
5 indicator in the first content request;  
6           means for generating a single part response in response to the existence of  
7 the multipart response expectation indicator in the first content request; and  
8           means for generating a multipart response after a second content request is  
9 received, the multipart response being related to the single part response.

1           15. A computer-readable medium having instructions stored thereon  
2 which are executable by a proxy by performing steps comprising:  
3           receiving a first content request;  
4           determining the existence of a multipart response expectation indicator in  
5 the first content request;  
6           generating a single part response in response to the existence of the  
7 multipart response expectation indicator in the first content request; and  
8           generating a multipart response after a second content request is received,  
9 the multipart response being related to the single part response.